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(54) **METHODS AND COMPOSITIONS FOR SECRETION OF HETEROLOGOUS POLYPEPTIDES**

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(58) **Field of Search** 435/6, 69.1, 172.3; 536/24.1, 23.7

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(57) **ABSTRACT**

The instant invention discloses the unexpected result that mutant signal sequences with reduced translational strength provided essentially complete processing and high levels of expression of a polypeptide of interest as compared to wild type signal sequences, and that many mammalian polypeptides require a narrow range of translation levels to achieve maximum secretion. A set of signal sequence vectors provides a range of translational strengths for optimizing expression of a polypeptide of interest.

4 Claims, 21 Drawing Sheets